DESIGN GUIDELINES FOR MONORAIL STATIONS

I. Site Planning and Architecture

A. Site and Context Responsiveness

1. Respond to site conditions and opportunities in the proportion, form, and scale of the station.

- Address specific site conditions and opportunities such as non-rectangular lots, location on prominent intersections, unusual topography, significant vegetation, and views or other natural features.
- Create a positive relationship with adjacent existing structures by referencing or linking the station through entryway placements, decorative elements and materials, or use of strong horizontal treatment at the height of surrounding buildings.
- Use the station walls and features to shape the public realm and streetfront in a way that enhances the pedestrian environment and street activity.
- Where applicable, stations sited on corner lots should be oriented to the corner and public street fronts, with service parking and vehicular access located away from the corner.
- Maximize use of natural daylight and orientation to sun.

B. Height, Bulk, and Scale

1. Provide a transition in height, bulk, and scale

- Stations should be sited and designed to provide as sensitive a transition as possible to nearby, less-intensive land use zones, with particular attention to zone edges.

C. Architectural Design and Fit with Program

1. Express the function and program of the station through station design elements, details, and massing

- Use station design elements, details, and massing to create a well-proportioned and unified form that both expresses the functions within and fully accommodates the architectural program.
- Design for multiple functions of the public spaces over time of day, week and annually.
- Exhibit a balance between the "elements of continuity"—expressing the station as one part of the Monorail system—and "elements of distinction"—lending uniqueness to each station as a reflection of its context.
- Encourage social and community interaction through the relationships between functions; seating edges adjacent to the pedestrian circulation; programming for community activities; artwork; and interactive media and video monitors.
- Maximize the transparency of stations as much as possible to activate the stations and related streetscape.
- Emphasize human scale features, elements, and details at the station and related pedestrian areas.

D. Visibility of Entrances

1. Ensure that station entrance(s) are visible and inviting from primary pedestrian routes and destinations, bus stops, and other public transportation facilities.

- Consider using landscaping, wayfinding elements, and/or special paving treatment to mark the entrance to the station.

- Where pedestrians are accessing the station from multiple directions, ensure there are visual cues to direct the pedestrian beyond the edge of the station to the actual entrance to the fare-paid zone.
- Ensure visible and accessible connections to the elevators and stairs leading pedestrians to the overhead platform, including connections to existing sidewalks (where they exist).

E. Exterior finishes and materials

1. *Use simple, easily maintained and well-crafted materials.*
   - Use quality materials that tolerate heavy use in high-traffic areas, age and weather well, are durable, and vandal resistant.
   - Develop a palette of finish materials that work together in a coherent and harmonious manner, relate to the station context, and exhibit human-scale at the street level. Include a variety of color and texture within the palette.

F. Systems Structures

1. *Transit Power Substations, Signal/Communications buildings, and other systems structures and equipment should be functionally but unobtrusively sited, seamlessly integrated into the design of the station and streetscape, and appropriately scaled and detailed to be an asset to the station and surrounding neighborhood.*
   - Site and design systems structures to be compatible with the overall station design, intended future uses of adjacent properties, and the neighborhood as a whole.
   - Consolidate system structures within the footprint and massing of the stationhouse as much as possible.
   - Wall surfaces should be pedestrian-oriented and human-scaled in terms of materials used, artwork, landscaping, screening, and other treatments.
   - Use systems buildings creatively to provide other amenities, such as a backdrop for bench seating, a place for artwork, or part of bicycle storage.

G. Station Amenities

1. *Include amenities at each station to facilitate use of the Monorail and accommodate the needs of passengers arriving or departing, and other uses of the public spaces.*
   - Adequate seating, both in and outside the fare paid zone
   - Pedestrian-scale lighting in all areas where passengers may be waiting or boarding the train
   - Public art
   - Phone (on or near platform) and/or security alerts
   - Waste receptacles (including cigarette receptacles at station entrances)
   - Clocks
   - Information display cases or kiosks including newspaper racks
   - Weather protection—canopies and windbreaks
   - Trees and landscaping (see detailed design guidelines)
   - Water and electrical power for use by potential street vendors

H. Station Landscaping

1. *Use landscaping to provide identity to the station and guideway, as an element of wayfinding, and to complement existing streetscape and/or street tree plantings adjacent to the station.*
   - As a first priority, provide trees for maximum benefit from landscaping. Where trees cannot be accommodated but planting is desired, provide low maintenance shrubs and/or groundcover.
   - Integrate with landscaping on adjacent private property, either existing or as required under development standards for future development.
   - Design station and street landscaping jointly, in order to create a landscape design that is compatible and greater than the sum of its parts.
   - Use landscape materials that are easily maintained and drought-tolerant, with an emphasis on evergreen species or deciduous species with seasonal variation in leaf color and attractive branching habit to provide year round presence.

I. Blank Walls

1. *All Stations: Avoid creating blank walls at stations; where blank walls are unavoidable, provide design treatment to increase pedestrian comfort and interest.*
   - Include wall surface treatment, street trees, drop lighting on buildings, benches, and planters to detail the wall to a human scale.

J. Overhead Weather Protection

1. *Provide overhead weather protection for both passengers and other pedestrians using the station area*.
   - Where possible, continue the weather protection already provided on nearby buildings.
   - When opaque material is used, the underside should be illuminated.
   - Design the weather protection to a height and depth that is a comfortable scale for pedestrians.

K. Fit with Potential Future Development

1. *Site and design the station and platform such that it enhances the viability of adjacent parcels for future development.*
   - Incorporate offsite functions and features adjacent to stations as appropriate, such as existing paths, open space, and landscaping.
   - Preserve development potential, sunlight, and street visibility giving serious consideration to the development parameters of adjacent developable property, especially the need for parking.

L. Sustainability

1. *Maximize environmental benefits and long-term investment benefits through sustainable practices and use of a "whole building" design approach.*
   - Reduce demands on potable water requirements.
   - Use porous pavement where appropriate.
   - Maximize quantity and quality of landscape, considering all surfaces as opportunities for vegetation to reduce urban heat island.
   - Consider native Northwest plants as a first choice to help create habitat and use drought tolerant plants as much as possible.
   - Site, orient and configure the stations to take advantage of daylighting, exterior views, and natural ventilation.

- Site the stations and design facades and roofs to respond to the sun. Consider distinct north, south, east, and west facades based on solar impacts, passive solar gain and control.
- Provide shading devices where appropriate.
- Use affordable renewable energy sources where appropriate.
- Use Life Cycle Assessment data as part of the materials selection process.
- Use local materials whenever possible.
- Use low toxicity materials and minimize finish coatings where possible.
- Use of wood certified as sustainable where possible.

II. Streetscape and Public Realm

A. Street improvements

1. Contribute to a high-quality street environment adjacent to Monorail facilities.

- Provide quality street improvements, furnishings, and other amenities that are complementary to, and supportive of, the Monorail station and neighborhood plans goals.
- Use the area beneath the guideway and/or platform as space to site and organize street furniture, signage, transit shelters, vending machines, and landscaping.
- Where applicable, coordinate the design and construction of these improvements with existing capital projects and plans to leverage the benefits provided by each project.

B. Open Space/Public Plazas

1. Provide open space and/or public plazas outside the fare-paid zone that are welcoming, comfortable, safe, and complementary to adjacent uses.

- Create inviting public open space at every station where there is opportunity to do so.
- Locate public spaces intended for high occupancy in areas that have sun access at the corresponding time of day when use is expected.
- Design spaces with careful attention to lighting, paving materials, sightlines, sun and wind orientation, and landscaping.
- Include public art sited within the spaces and/or develop the open spaces as artworks in themselves.
- Provide clear and graceful transitions between public spaces for all users and the fare-paid zone for Monorail passengers.
- Where applicable, coordinate design with other adjacent or nearby community gathering places or open space.

C. Street and Open Space Landscaping

1. Provide landscaping to complement existing streetscape and/or street tree plantings adjacent to the station.

- Maximize the planting potential of the available space, in accordance with City policy regarding tree selection, spacing, and care; in other words, requiring trees wherever they can be planted without compromising facility function and safety, and requiring large scale trees rather than small scale where it is feasible for them to successfully develop.
- Where trees cannot be accommodated but planting is desired to improve the safety and/or aesthetics of the facility, provide low maintenance shrubs and/or groundcover.
- Minimize the removal of existing landscaping wherever possible, particularly where impacts are temporary such as removal of vegetation for construction staging. When distinctive or character-

giving vegetation must be removed, it should be replaced with new plantings of a similar type and/or size as that removed.
- Use landscape materials that are easily maintained, drought-tolerant, and can withstand local conditions, including an open corridor of primarily impermeable surfaces

D. Public Art

1. Include public art that is sited in highly visible and prominent locations.
- Incorporate art into the functional elements of the station and/or streetscape.
- Consider artwork that thematically spans one or more stations, creating visual relationships between those stations.
- Develop artwork in collaboration with other entities such as local arts councils and community organizations.

E. Lighting

1. Illuminate the station and related street envelope and its activities to provide a safe and attractive environment.
- Incorporate a combination of lighting conditions including ambient, direct, and path lighting in the design of each station and related areas (plaza, crosswalks), the street itself, and the platform.
- Consider the use of light as art.
- Limit accent lighting that creates ambient light to bridge areas and other highly visible locations such as adjacent buildings of historic or architectural value.
- Use neighborhood goals to inform the lighting differential; such as reinforcing gateways through lighting and protecting single-family residents from glare.
- Use Crime Prevention Through Environmental Design (CPTED) guidelines to establish visibility and lighting parameters.

III. Access and Connections

A. Pedestrian Access and Circulation

1. Provide comfortable, safe, and functional pedestrian circulation to, in, and around stations.
- Ensure that circulation paths, gathering areas, and elevators/stairs/escalators are sized to accommodate expected ridership and other pedestrian traffic (based on peak ridership), including the flexibility to allow for reorganization in the future to accommodate greater/changed pedestrian activity. Pay particular attention to corners where pedestrian flows converge and people gather.
- Provide clear connections to the station from adjacent sidewalks and across streets to/from adjoining communities via safe and attractive crossings and waiting areas (corner or midblock).
- Provide consistent and predictable treatment of pedestrian crossings throughout the system to reinforce safe street crossing practices.
- Make improvements to traffic signals and timing/phasing as needed.
- Include different surface materials and/or a change in furnishings such as paving patterns, color, signage, landscaping, bollards, lighting or seating that extend across the street to mark pedestrian routes to differentiate pedestrian areas from driveways, and loading or service access and zones.

- Minimize conflicts between pedestrians, cyclists, and vehicles of all kinds at and around stations, including locating any service parking (for systems structures, substations) such that it does not conflict with or impede pedestrian and multi-modal access to the station.
- Provide connections to neighborhood trail systems where possible and applicable.

B. Bicycle Access and Parking/Storage

1. *Provide access to the station for cyclists and otherwise encourage cyclists to use the Monorail.*
   - Focus on connections from established/known bike routes, including improvements to facilitate safe bicycle movements
   - Provide bicycle parking and storage facilities in close proximity to station entrances that are secure, visible, and convenient while not in conflict with the primary flow of pedestrians.
   - Post trail information clearly at each station, alongside Monorail rules and procedures for bringing bicycles onto trains
   - Plan to accommodate anticipated future demand for bicycle parking either on- or off-site.

C. Transit Facilities and Connections

1. *Provide clear and safe connections for passengers transferring between Monorail and buses.*
   - Post information on bus routes and schedules alongside Monorail schedules and information to support multi-modal transportation.
   - Coordinate any relocation and design of bus stops with Monorail station design and general street improvements to provide attractive and convenient connections for passengers outside the ¼ mile walking distance to stations.

D. Drop-Off/Pick-Up Zones

1. *Provide drop-off/pick-up zones located conveniently to station entrance(s) without creating undue traffic and circulation impacts to adjacent uses.*
   - Direct drop-off activity to one or more clearly identified areas to preclude other drop-off activity occurring elsewhere in an ad hoc manner, and in order to disperse vehicular traffic and minimize disruption to traffic flow in and around the station area.

E. Traffic Circulation

1. *Traffic circulation around stations should be maintained for all users, balancing the needs of vehicles of all kinds—buses, trucks, cars, service vehicles, and emergency vehicles—with pedestrians and cyclists and the Monorail system requirements.*
   - Conflicts between vehicles of all kinds—buses, trucks, cars, light rail, and emergency vehicles—and pedestrians should be minimized, with clear demarcation of pedestrian zones and priority given to pedestrians at the intersections nearest each station.
   - Safety measures should be carefully considered and implemented in locations where vehicle, bicycle and pedestrian movements intersect.

F. Signage and Wayfinding

1. *Provide clear, coordinated, and appropriately scaled wayfinding and signage along principal pedestrian routes within a ½ mile of the station.*
   - Coordinate all street and Monorail-related signage, and introduce interpretive signage or other wayfinding elements as desired.

- Use signage to direct passengers to key destinations within the vicinity of each station.
- Use views of prominent landscape features, landforms, and/or manmade structures to orient pedestrians and enhance wayfinding; e.g. Elliott Bay, the Olympics, Salmon Bay, Delridge, Space Needle, and city skyline.

Station Guidelines by Typology: Urban Core Stations

Key Issues and Opportunities

- Careful integration of the monorail into the fabric of the city's downtown
- Minimizing impacts to key streetscapes; open spaces and plazas; vistas/views; significant historic, civic, and cultural buildings; and overall character
- Maximizing the potential for the Monorail to play a significant role in creating an integrated transportation network with transit, light rail, and commuter trains
- Adding another dimension to the streetscape and overall street activity through pedestrian circulation at and above the street level, while not diminishing existing street level activity
- Supporting future development adjacent to the station…

Site Planning and Architecture

Site and Context Responsiveness: Maintain a street edge that is consistent with the rest of the block.

Design Context and Fit with Program: Seek to integrate the station with adjacent development wherever possible, favoring an infill approach that minimizes the footprint of the station while still meeting functional needs.

Visibility of Entrances: Where there are opportunities to incorporate stations into adjacent development or jointly develop a station site, ensure clear visibility of station entrances with particular attention to differentiating the public station entrance(s) from private entrances.

Systems Structures: Where possible, incorporate systems structure and related service access into the stationhouse, adjacent development, or underground in order to preserve open space for pedestrian use, particularly at the station streetfront.

Station Amenities: Seize opportunities to take advantage of existing public amenities near stations as a way of leveraging additional facilities and services for passengers than would otherwise be provided.

Streetscape and Public Realm

Lighting/Urban Core: Select lighting fixtures, wayfinding systems, and street furniture from among those already in use in the downtown core in order to integrate the Monorail into the larger context of urban street furnishings.

Open Space/Public Plazas: Assess inventory of other nearby public plazas and design station plaza to complement, not duplicate, public open space needs and facilities.

Access and Connections

Drop-off/Pick-up Zones: Because competition for limited curb space requires priority usage of station streetfront for transit, dedicated zones for drop-off and pick-up should only be provided as space is available.

Station Guidelines by Typology: Town Center Stations

Key Issues and Opportunities

- Balancing the desire to maintain a "small town" or village atmosphere with the opportunity to add a broader mix of uses and higher densities with the advent of the Monorail.
- Ensuring that the Monorail does not overwhelm the town center in scale, massing, or character; but instead fits within existing cherished urban character, or sets a tone for future development that is high in quality and pedestrian-oriented.

Site Planning and Architecture

Site and Context Responsiveness: For new or emerging town centers, reinforce an orientation toward pedestrian-friendly and higher density development through the character of station design and creation of an urban street edge up to the sidewalk. Where the town center includes a "mixed" architectural character, selectively respond to existing character in order to build upon the best examples while not perpetuating the lesser ones. Build upon successful window proportions, entryway placements, decorative elements, and materials to continue an appropriate pattern.

Height, Bulk, and Scale: Consider additional refinements beyond required setbacks in transitions in height, bulk, and scale at zone edges in order to carefully integrate the Monorail with adjacent development. Use modulation, color, texture, entries, materials, cornice lines, or other features to break the station façade into sections and character consistent with the desired town center context and character.

Architectural Design and Fit with Program: Use station architecture to set a standard of quality and identity for new or still developing town centers. Include space for the development of retail or commercial uses serving passengers and community members wherever possible and consistent with neighborhood plan goals.

Visibility of Entrances: Ensure that the entrance is visible from all the directions that pedestrians are expected to approach the station from. In order to optimize access, the station may warrant more than one entrance based on pedestrian travel routes, size of blocks (and related walking distance length), and site configuration.

Station Amenities: Include a higher level of amenities for these stations given their prominence within a small commercial area and the probable lack of other public amenities; e.g. water fountain, restroom, clock.

Station as Gateway: Where appropriate and desired by the community, the station should serve as a "gateway" to the surrounding community. Use the height of the station architecture to create a "landmark" or identifiable feature for the neighborhood. Preserve views into the community at or

through the station. Use public art, lighting, distinctive materials, and other urban design features to establish the station as a gateway. Corner locations can be particularly effective as gateway opportunities.

Streetscape and Public Realm

Open Space: Seize opportunities to include public plaza/open space as part of the station program in order to contribute to the town center apart from the station's function as a transportation facility.

Access and Connections

Pedestrian Access and Circulation: Use station-related pedestrian access and circulation as an opportunity to support pedestrian activity at the street level as a priority. Assist in creating lively streetfronts through pedestrian activity to and from the station, that ultimately helps to create a larger pedestrian network of sidewalks, paths, crossings, and building entries. Incorporate walkways that encourage movement through the site to the surrounding area.

Station Guidelines by Typology: Residential Village Stations

Key Issues and Opportunities

- Not overwhelming the adjacent residential development with the scale and mass of the station, platform, and guideway
- Maintaining a safe and secure station in the absence of heavy pedestrian activity that is present in urban core or town center stations

Site Planning and Architecture

Site and Context Responsiveness: Pay particular attention to scale, mass, and materials of the station and related systems structures in order to be a "good neighbor" and provide a sensitive fit in with the residential context. Ensure that systems structures are sited such that impacts related to access, noise, and lighting are directed away from adjacent housing.

Streetscape and Public Realm

Lighting: Provide lighting adequate to ensure pedestrian/passenger safety without creating glare or spillover light into residential areas.

Landscaping: Consider landscaping that is more residential or domestic in design and/or plant materials in order to fit with adjacent residential development.

Station Guidelines by Typology: Commuter Stop Stations

Key Issues and Opportunities

- Accommodating peak crowds at commute times, ensuring pedestrian/passenger safety during periods of lower use

Site Planning and Architecture

Architectural Design and Fit with Program: Include space for the development of retail or commercial uses serving commuters wherever possible.

Amenities: Provide a range of amenities tailored to the needs of commuters; including overhead weather protection to accommodate peak loads of commuters, readerboards or other "realtime" information to provide commuters with up to date data on upcoming trains, and space onsite or for vendor carts providing commuter-related goods and services.

Access and Connections

Pedestrian Access and Circulation: Provide clear pedestrian paths to and from the station and major destination, including adequate space to accommodate surges of pedestrians during commute times. Consider adjusting crosswalk timing to extend crossing times as needed at these times.

Station Guidelines by Typology: Multi-modal Hub Stations

Key Issues and Opportunities

- Ensuring smooth transfers between transit modes, eliminating conflicts between pedestrians and vehicles/buses
- Accommodating multi-modal needs while still integrating the station within its context

Site Planning and Architecture

Visibility of Entrances: Ideally, entrances to each transit mode should be visible from the other in order to facilitate seamless pedestrian movement between transit modes. Where this is not possible, signage and wayfinding is critical to connecting people to modes and destinations (see below).

Station Amenities: Include a greater range of amenities suited to passengers transferring between transit modes and possibly traveling longer distances and/or experiencing wait times between modes. Amenities may include phones; vendor space for newspapers/magazines, coffee, shoe repair/shine, other personal services; computer hook-ups; lockers; extra seating; and restrooms. Provide continuous weather protection between transit modes.

Access and Connections

Pedestrian Access and Circulation: Ensure that paths are as clear and direct as possible from one mode to the next. Where passengers must walk longer distances and/or experience a change in grade, strive to make the walk as clear, interesting, and pleasant as possible in order to minimize the impression of inconvenience or confusion. Provide enough space to accommodate expected peak passenger loads and transfers.

Pick-up/Drop-off Zones: Anticipate a higher level of pick-up/drop-off activity at multi-modal stations and plan the station area accordingly. Ensure that these zones do not conflict with major pedestrian corridors in order to keep those areas as free-flowing as possible.

Wayfinding: Provide clear and coordinated wayfinding to and from each transit mode/station, including a higher level of information about trip planning and destinations than is provided at other stations. Provide information about all modes at each station/transit entry in order to ensure that passengers have the ability to know in advance when their connection can be made (before walking to the next mode).